OFFICE OF THE CITY CLERK

TRANSPORTATION & INFRASTRUCTURE COMMITTEE

February 24, 2010

The Transportation & Infrastructure Committee of the City of Mesa met in the lower level meeting room of the Council Chambers, 57 East 1st Street, on February 24, 2010 at 4:02 p.m.

COMMITTEE PRESENT	COMMITTEE ABSENT	STAFF PRESENT
Alex Finter, Chairman	None	Jack Friedline
Kyle Jones		Donna Bronski
Dave Richins		Dan Cleavenger
		Alan Sanderson

MESA HIGH SCHOOL STUDENTS PRESENT		MESA HIGH SCHOOL STAFF PRESENT
Anais Alvarado	Mary Hiser	Theresa Ratti, Instructor
LaTanya Becenti	Taylor McDowell	Debbi Bertolet
Cortney Clawson	Daisy Millanes	
Dominic DeCono	Jamie Monkman	
Austin Eakin	Anna White	

Chairman Finter excused Committeemember Richins from the beginning of the meeting. He arrived at 4:07 p.m.

1. Items from citizens present.

   There were no items from citizens present.

2. Hear a presentation from Mesa High School students and discuss results of a "Project Citizen" research effort related to lagging left turn arrows.

   Taylor McDowell, representing the group of Mesa High School students, addressed the Committee and advised that their research on lagging left turn arrows was conducted as a part of the "Project Citizen" Program. He asked his fellow students to introduce themselves to the Committee.

Chairman Finter welcomed the students and noted that since being elected to the Council, he has received many questions regarding this issue.

The students provided information regarding their research as outlined in the PowerPoint presentation **(see Attachment 1)**, comparing leading and lagging left turn arrows based on data obtained from Gilbert, Tucson, the Maricopa Association of Governments (MAG) and the City of Mesa; listing the potential benefits and disadvantages of lagging left turns (see page 4 of Attachment 1); and proposing an action plan for the City of Mesa (see pages 5 and 6 of Attachment 1).

Chairman Finter invited City of Mesa Transportation Department personnel to come forward to participate in the discussion with the students.

Committeemember Jones commended the students for their effort in researching this topic. Referring to the statistical data, he noted that the City of Mesa encompasses approximately 135 square miles and that a more accurate comparison of crash statistics would be on a per capita basis. He thanked the students for the presentation.

Committeemember Richins offered the students the following suggestions regarding future PowerPoint presentations:

- Use the PowerPoint to support what is being said rather than reading the PowerPoint.
- Label the graphs presented in the PowerPoint.
- Use bullet points in the PowerPoint and minimize the number of words.

In response to a question from Committeemember Jones, Mr. McDowell stated that he and his fellow students collected data supporting the statement that intersections with lagging left turn signals have fewer fatalities.

Transportation Department Director Dan Cleavenger introduced Deputy Transportation Director Alan Sanderson who is responsible for the Traffic Engineering area, and he noted that both he and Mr. Sanderson have been with the City for more than twenty years. He commended the students for their interest in public policy.

Mr. Cleavenger said that many factors are considered when a decision is made regarding the use of leading or lagging left turn arrows, and he advised that Mesa does have eight locations in the City equipped with lagging left turn arrows. He explained that utilizing the green arrows for a longer period of time in one direction while the signal turns red in the other direction enables traffic to move more efficiently. Mr. Cleavenger stated that the City tries to achieve a balance by enabling the movement of through traffic as well as the traffic attempting to turn left. He also invited the students to visit the City's Traffic Management Center.

Mr. Sanderson stated that tradeoffs are often necessary when managing traffic. He suggested that the students clarify their presentation to differentiate between "fully protected" signals (when the arrow turns from green to yellow to red) and "protected permissive" (when the arrow goes from green to yellow to a green ball), both of which can be either lagging or leading arrows. Mr. Sanderson reported that traffic studies indicate that the greatest number of left-turn crashes occur in locations with heavy traffic conditions where no arrow signals are present. He noted that a small change made in one area can ripple through the entire City.

Responding to a question from Committeemember Jones, Mr. Sanderson said that most left turn lanes have detection systems that can be controlled from the Traffic Management Center to adjust to changing traffic conditions or the time of day. He added that the City was awarded a Federal grant to fund the future installation of a real time adaptive system in the Superstition Springs Mall area.

Mr. Cleavenger stated that the real time adaptive system should be particularly valuable during peak periods in the Superstition Springs area, such as during the Christmas shopping season. He said that if the system proves to be successful, installations could be made in other areas of the City.

Mr. Sanderson explained that the City utilizes lagging left turns in the freeway overpass areas, on streets in proximity to freeways, and in some areas there are lagging left turns in one direction and leading left turns in the other direction in order to maintain the movement of high-volume traffic lanes.

Discussion ensued relative to the fact that lagging turn signals are more effective in areas where there are short distances between traffic signals; and that a flashing yellow arrow could signal that a permissive left turn is allowed.

Mr. Sanderson noted that the Town of Gilbert and the City of Chandler conducted a pilot study regarding the left turn signals, but the Gilbert Town Council implemented lagging turn signals prior to the completion of the pilot study. He added that the City of Chandler delayed their decision until the completion of the pilot study, the results of which indicated that intersections with lagging turn signals have a larger number of crashes, increased traffic delays and longer travel times.

Further discussion ensued relative to the fact that Gilbert, Scottsdale and Tucson are the municipalities in Arizona utilizing lagging turn signals; that the City of Mesa utilizes both formats and determines the format that is best for the intersection; that the layout of each municipality impacts the manner in which traffic progresses; and although many changes are implemented on site, the City has the capability to implement changes to left turn signals from the Traffic Management Center.

Mr. Cleavenger said that major changes at intersections would also require signage to notify citizens of the change. He explained that proposals for major changes include technical data in support of staff's recommendation and would be presented to the Council prior to implementation.

Chairman Finter encouraged the students to tour the Traffic Management Center, and he thanked them for the presentation.

Mr. McDowell, on behalf of the students, thanked the Committee for the opportunity to present their report.

3. Adjournment.

Without objection, the Transportation & Infrastructure Committee meeting adjourned at 4:55 p.m.

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Transportation & Infrastructure Committee meeting of the City of Mesa, Arizona, held on the 24th day of February 2010. I further certify that the meeting was duly called and held and that a quorum was present.

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LINDA CROCKER, CITY CLERK

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Attachment (1)